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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,452	08/14/2008	Hiroshi Yamada	07043.0053	4767

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EXAMINER	
WOOD, JR, STEVEN A	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,452	YAMADA ET AL.	
	Examiner	Art Unit	
	STEVEN WOOD	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *8/14/2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. **10/577452**, which entered PCT national stage in the U.S. under 371(c) on **10/28/2004**, is presented for examination by the examiner. **Claims 1 – 18** have been canceled by Applicant without prejudice. **Claims 19 – 34** are newly presented and remain pending.

Claim Objections

2. **Claim 29** is objected to because of the following informalities: it recites the limitation "a second changing unit." Because this claim does not include a first changing unit and depends from a claim that does not include a first changing unit, the changing unit should be identified as "a first changing unit" or "a changing unit." Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 19, 21, 23, 24 & 30 – 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Murai, et al., (US 6539000 B1) (hereinafter Murai), in view of Hirasawa (US 5341363 A).

5. Regarding **claim 19**, Murai discloses a terminal apparatus connected to a network and configured to perform an operation, the terminal apparatus comprising: a packet volume detecting unit configured to detect a number of packets received from the network in a predetermined time, (Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 (**a packet volume detecting unit**) is provided to the terminal, and counts the number of multicast packets (**configured to detect a number of packets received from the network**) from the beginning of multicast in a given group until a predetermined period of time elapses (**in a predetermined time**)).

Murai does not explicitly teach *a logical disconnecting unit configured to logically disconnect the terminal apparatus from the network when the number of packets detected by the packet volume detecting unit exceeds a predetermined value.*

Hirasawa explicitly discloses a logical disconnecting unit configured to logically disconnect the terminal apparatus from the network when the number of packets detected by the packet volume detecting unit exceeds a predetermined value, (Col. 6, line 65 – Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, (**when the number of packets detected by the packet volume detecting unit exceeds a predetermined value**) the logical connecting/disconnecting section 19 (**a logical disconnecting unit**) logically disconnects the computer system 1 (**configured to logically disconnect the terminal apparatus**) from the LAN control device 3 (**from the network**)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Murai by incorporating the teaching of Hirasawa to provide a computer system that is able to inform the computer personnel of the failure whenever a network failure, such as the abnormal appearance of broadcast packets, has taken place, or its signs have appeared, and then logically disconnect itself from the LAN, and to provide a computer system capable of logically connecting itself to the LAN after the network failure has been removed (Hirasawa; Col. 1, line 66 – Col. 2, line 6).

6. Regarding **claim 21**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa discloses the terminal apparatus, further including: a reconnecting unit configured to reconnect said terminal apparatus to said network after a predetermined return time has elapsed since said terminal apparatus is disconnected from said network by said logical disconnecting unit, (Hirasawa: Col. 7, line 57 – Col. 8, line 2; when the failure detecting section 15 has detected a broadcast storm, this section 15 informs the connection instructing section 17 of the occurrence of a broadcast storm. Receiving the information from the failure detecting section 15, the connection instructing section 17 actuates the timer 18 **(since said terminal apparatus is disconnected from said network by said logical disconnecting unit)**). When the set time on the timer 18 has expired **(after a predetermined return time has elapsed)**, the connection instructing section 17 issues a connection instruction to the logical connecting/disconnecting section 19 to rejoin the computer system 1 to the network. This permits the logical connecting/disconnecting section 19 (**a reconnecting unit**) to logically connect the computer system 1 **(configured to reconnect said**

terminal apparatus) to the LAN control system 3 (**to said network**) for restoration to its original state).

7. Regarding **claim 23**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa discloses the terminal apparatus, further including: an inputting device for inputting a connection request for connecting said terminal apparatus to said network, (Hirasawa: Fig. 1; Col. 4, lines 18 – 21; a connection instructing section 17 for receiving a logical connection request (**for inputting a connection request**) from the input/output device 12 (**an inputting device**) and then issuing a connection instruction to a logical connecting/disconnecting section 19 (**for connecting said terminal apparatus to said network**)).

8. Regarding **claim 24**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa discloses the terminal apparatus, further including: a display device for displaying the fact that said terminal apparatus is disconnected, (Hirasawa: Col. 7, lines 29 – 33; informing section 16 allows the input/output device 12 (**a display device**) to display a message that a network failure has occurred (**for displaying the fact that said terminal apparatus is disconnected**), and the packet transferred from the detecting section 15 (that is, the packet flowing over the LAN at that time).

9. Regarding **claim 26**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa discloses the terminal

apparatus, wherein said packet volume detecting unit does not detect said number of packets when the terminal apparatus is logically disconnected from said network, (Murai: Fig. 1; Col. 6, lines 2 – 12; information communication terminals 100, 110a, 110b, 120a, and 120b such as personal computers and the like, terminals 100, 110a and 110b mainly comprise communication section 101, multicast section 103, and multicast packet count section 106 **(considering Murai Fig. 1 and description of the terminals as including the packet count section, examiner concludes that in accordance with the combined teaching of Murai and Hirasawa, said packet packet volume detecting unit *INHERENTLY* does not detect said number of packets when the terminal apparatus is logically disconnected from said network)**).

10. Regarding **claim 30**, Murai discloses a control method of a terminal apparatus connected to a network and configured to perform an operation, the control method of a terminal apparatus comprising the steps of: detecting a number of packets received from a network in a predetermined time, (Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 is provided to the terminal, and counts the number of multicast packets **(detecting a number of packets received from a network)** from the beginning of multicast in a given group until a predetermined period of time elapses **(in a predetermined time)**).

Murai does not explicitly teach *a logical disconnecting unit configured to logically disconnect the terminal apparatus from the network when the number of packets detected by the packet volume detecting unit exceeds a predetermined value.*

Hirasawa explicitly discloses logically disconnecting the terminal apparatus from the network when the detected number of packets exceeds a predetermined value, (Col. 6, line 65 –

Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, **(when the number of packets detected by the packet volume detecting unit exceeds a predetermined value)** the logical connecting/disconnecting section 19 logically disconnects the computer system 1 **(logically disconnecting the terminal apparatus)** from the LAN control device 3 **(from the network)**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Murai by incorporating the teaching of Hirasawa to provide a computer system that is able to inform the computer personnel of the failure whenever a network failure, such as the abnormal appearance of broadcast packets, has taken place, or its signs have appeared, and then logically disconnect itself from the LAN, and to provide a computer system capable of logically connecting itself to the LAN after the network failure has been removed (Hirasawa; Col. 1, line 66 – Col. 2, line 6).

11. Regarding **claim 31**, the combined teaching of Murai and Hirasawa discloses a computer readable medium with code embodied therein for performing a control method of a terminal apparatus connected to a network, (Hirasawa: Figs. 2 – 4; Col. 4, lines 45 – 46; computers (hereinafter, referred to as WSes) 21 to 23 **(computer readable medium of a terminal apparatus)** connected to the LAN 2 **(connected to a network)**; Col. 5, lines 16 – 18; receiving a packet from WS23, WS22 recognizes it as IP broadcast packet as shown by reference character S2 and then processes it **(with code embodied therein for performing a control method)**, and configured to perform an operation, the method comprising: detecting a number of packets received from the network in a predetermined time, (Fig. 1; Col. 9, lines 20 – 24; multicast

packet count section 106 is provided to the terminal, and counts the number of multicast packets **(detecting a number of packets received from a network)** from the beginning of multicast in a given group until a predetermined period of time elapses **(in a predetermined time))**, and logically disconnecting the terminal apparatus from the network when the detected number of packets exceeds a predetermined value, (Col. 6, line 65 – Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, **(when the number of packets detected by the packet volume detecting unit exceeds a predetermined value)** the logical connecting/disconnecting section 19 logically disconnects the computer system 1 **(logically disconnecting the terminal apparatus)** from the LAN control device 3 **(from the network)**).

12. Regarding **claim 32**, the combined teaching of Murai and Hirasawa discloses a network system including a plurality of terminal apparatuses connected to a network, each terminal apparatus comprising: a packet volume detecting unit configured to detect the number of packets received from the network in a predetermined time, (Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 **(a packet volume detecting unit)** is provided to the terminal, and counts the number of multicast packets **(configured to detect a number of packets received from the network)** from the beginning of multicast in a given group until a predetermined period of time elapses **(in a predetermined time))**, and a logical disconnecting unit configured to logically disconnect the terminal apparatus from the network when the number of packets detected by the packet volume detecting unit exceeds a predetermined value, (Col. 6, line 65 – Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a

network failure such as a meltdown or a broadcast storm, **(when the number of packets detected by the packet volume detecting unit exceeds a predetermined value)** the logical connecting/disconnecting section 19 **(a logical disconnecting unit)** logically disconnects the computer system 1 **(configured to logically disconnect the terminal apparatus)** from the LAN control device 3 **(from the network))**.

13. Regarding **claim 33**, the combined teaching of Murai and Hirasawa discloses a control method of a network system including a plurality of terminal apparatuses connected to a network, the control method of a network system comprising the steps of: detecting, in each terminal apparatus, the number of packets received from the network in a predetermined time, (Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 is provided to the terminal, and counts the number of multicast packets **(detecting a number of packets received from a network)** from the beginning of multicast in a given group until a predetermined period of time elapses **(in a predetermined time))**, and logically disconnecting a corresponding terminal apparatus from the network when the detected number of packets exceeds a predetermined value, (Col. 6, line 65 – Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, **(when the number of packets detected by the packet volume detecting unit exceeds a predetermined value)** the logical connecting/disconnecting section 19 logically disconnects the computer system 1 **(logically disconnecting the terminal apparatus)** from the LAN control device 3 **(from the network)**).

14. Regarding **claim 34**, the combined teaching of Murai and Hirasawa discloses a computer readable medium with code embodied therein for performing a control method of a network system including a plurality of terminal apparatuses connected to a network, (Hirasawa: Figs. 2 – 4; Col. 4, lines 45 – 46; computers (hereinafter, referred to as WSes) 21 to 23 (**computer readable medium of a plurality terminal apparatuses**) connected to the LAN 2 (**connected to a network**); (17) Receiving a packet from WS23, WS22 recognizes it as IP broadcast packet as shown by reference character S2 and then processes it (**with code embodied therein for performing a control method of a network system**), the method comprising: detecting, in each of the plurality of terminal apparatuses, a number of packets received from the network in a predetermined time, (Fig. 1; Col. 9, lines 20 – 24; multicast packet count section 106 is provided to the terminal, and counts the number of multicast packets (**detecting, in each of the plurality of terminal apparatuses, a number of packets received from a network**) from the beginning of multicast in a given group until a predetermined period of time elapses (**in a predetermined time**)), and logically disconnecting a corresponding terminal apparatus from the network when the detected number of packets exceeds a predetermined value, (Col. 6, line 65 – Col. 7, line 2; after having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, (**when the number of packets detected by the packet volume detecting unit exceeds a predetermined value**) the logical connecting/disconnecting section 19 logically disconnects the computer system 1 (**logically disconnecting the terminal apparatus**) from the LAN control device 3 (**from the network**)).

15. **Claims 20, 22 & 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai and Hirasawa, in view of Burrows, et al., (US 20020073338 A1) (hereinafter Burrows).

16. Regarding **claim 20**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa discloses the logical disconnecting unit logically disconnects the terminal apparatus from the network when the number of packets received in a predetermined time exceeds a predetermined value, (Hirasawa: (32) After having been informed that the failure detecting section 15 has detected a network failure such as a meltdown or a broadcast storm, **(when the number of packets detected by the packet volume detecting unit exceeds a predetermined value)** the logical connecting/disconnecting section 19 **(a logical disconnecting unit)** logically disconnects the computer system 1 **(configured to logically disconnect the terminal apparatus)** from the LAN control device 3 **(from the network)**).

The combined teaching of Murai and Hirasawa does not explicitly teach *the terminal apparatus, wherein the packet volume detecting unit detects the number of only those broadcast packets among packets received by the terminal apparatus*.

Burrows explicitly discloses the terminal apparatus, wherein the packet volume detecting unit detects the number of only those broadcast packets among packets received by the terminal apparatus (paragraph 39; packet traffic monitor learns about the per-port ingress packet counters in the switches and it can poll such counters order to observe the number of broadcast packets).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai and Hirasawa by incorporating the teaching of Burrows to limit the impact of undesirable behavior of computers on a shared data network through which packets of data are passing to all its computers (Burrows; paragraph 30).

17. Regarding **claim 22**, the rejection of claim 21 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa does not explicitly teach *the terminal apparatus, wherein said reconnecting unit increases the length of said return time longer than that of said return time in a previous disconnection when said terminal apparatus is disconnected again after the reconnection.*

Burrows explicitly discloses the terminal apparatus, wherein said reconnecting unit increases the length of said return time longer than that of said return time in a previous disconnection when said terminal apparatus is disconnected again after the reconnection, (paragraph 45; a skeptic **(said reconnecting unit)** is used when a fault monitor recognizes a "broken" component or connectivity (or link). Upon receiving a fault indication, the skeptic enters a wait state before it lets such component or connectivity to recover, i.e., rejoin the network and prompt reconfiguration of the network topology graph, after it starts working again. When a broken component (e.g., host) is detected, that component is taken out of operation for successively longer periods **(increases the length of said return time longer than that of said return time in a previous disconnection)** in a random exponential backoff before an attempt is made to use it once more. Conversely, the backoff time is increased if the component breaks again **(when said terminal apparatus is disconnected again after the reconnection)**. Thus,

often or intermittently broken components are "removed" from the network for progressively longer periods of time, and "repaired" components eventually "forget" their failed history).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai and Hirasawa by incorporating the teaching of Burrows to limit the impact of undesirable behavior of computers on a shared data network through which packets of data are passing to all its computers (Burrows; paragraph 30).

18. Regarding **claim 25**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa discloses the terminal apparatus, further including: a display device for displaying the history information, (Hirasawa: (34) the informing section 16 allows the input/output device 12 **(a display device**) to display a message that a network failure has occurred **(for displaying the fact that said terminal apparatus is disconnected – Examiner notes that it is an obvious extension to display how many times said terminal apparatus has been disconnected during a recent timeframe, i.e. the history infomation)**, and the packet transferred from the detecting section 15 (that is, the packet flowing over the LAN at that time).

The combined teaching of Murai and Hirasawa does not explicitly teach *the terminal apparatus, further including: a unit for storing history information about disconnection and reconnection of said terminal apparatus*.

Burrows explicitly discloses the terminal apparatus, further including: a unit for storing history information about disconnection and reconnection of said terminal apparatus, (paragraph 45; a skeptic **(a unit for storing history information**) is used when a fault monitor, separate or

integral to the skeptic, recognizes a "broken" component or connectivity (or link). Thus, often or intermittently broken components are "removed" from the network for progressively longer periods of time, and "repaired" components eventually "forget" their failed history. In one embodiment, the good history can be classified as skepticism level zero (0). Failure cycles in greater numbers increase the skepticism level **(history information about disconnection and reconnection of said terminal apparatus)**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai and Hirasawa by incorporating the teaching of Burrows to limit the impact of undesirable behavior of computers on a shared data network through which packets of data are passing to all its computers (Burrows; paragraph 30).

19. **Claims 27 & 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai and Hirasawa, in view of Foschiano, et al., (US 20040022253 A1) (hereinafter Foschiano).

20. Regarding **claim 27**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa does not explicitly teach *the terminal apparatus, further including: a first changing unit configured to change said predetermined value in accordance with a processing load required via said network,*

Foschiano explicitly discloses the terminal apparatus, further including: a first changing unit configured to change said predetermined value in accordance with a processing load required via said network, (Figs. 5 & 8; paragraph 42; by shutting down a port transmitting large

volumes of such packets, or other appropriate response, this prevents packet storms, and the overload of the inspection engine analyzing such packets, **(in accordance with a processing load required via said network)**; paragraph 55; a processor 520 **(a first changing unit)** (in the manner of inspection engine 470 of FIG. 4B); paragraph 63; a determination as to whether the total number of such packets have exceeded a limit, which may be pre-set or dynamic (step 800) **(configured to change said predetermined value)**. As noted previously, an advantage of such software-based analysis is the ability to dynamically respond to varying packet traffic conditions, and so take into account network conditions when performing such analyses).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai and Hirasawa by incorporating the teaching of Foschiano to protect against "man in the middle" and other types of network attacks (Foschiano; paragraphs 10 & 20).

21. Regarding **claim 28**, the rejection of claim 27 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa does not explicitly teach *the terminal apparatus, wherein said first changing unit changes said predetermined value in accordance with a transition of said processing load required via said network.*

Foschiano explicitly discloses the terminal apparatus, wherein said first changing unit changes said predetermined value in accordance with a transition of said processing load required via said network, (Figs. 5 & 8; paragraph 55; a processor 520 **(said first changing unit)** (in the manner of inspection engine 470 of FIG. 4B); paragraph 63; a determination as to whether the total number of such packets have exceeded a limit, which may be pre-set or

dynamic (step 800) (**changes said predetermined value**). As noted previously, an advantage of such software-based analysis is the ability to dynamically respond to varying packet traffic conditions (**in accordance with a processing load required via said network**), and so take into account network conditions when performing such analyses).

22. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teaching of Murai and Hirasawa, in view of Yang, et al., (US 20040193719 A1) (hereinafter Yang).

23. Regarding **claim 29**, the rejection of claim 19 is incorporated and only further limitations will be addressed. The combined teaching of Murai and Hirasawa does not explicitly teach *the terminal apparatus, further including: a second changing unit configured to change said predetermined value in accordance with a status of said network.*

Yang explicitly discloses the terminal apparatus, further including: a second changing unit configured to change said predetermined value in accordance with a status of said network, (Fig. 2; paragraph 15; packet counter counts the number of packets removed from the transmission buffer 122 and transmitted from the base station transmission system (BTS) 120 to access terminals (ATs) 130 since the last flow control message was sent. BTS 120 (**a second changing unit**) dynamically establishes the packet count threshold (**configured to change said predetermined value**) based on the status (occupancy or availability) of the transmission buffer 122 (**in accordance with a status of said network**)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teaching of Murai and Hirasawa by incorporating the teaching of Yang to regulate the rate of data flow while not causing either an overflow or underflow in a network communication device (Yang; paragraph 4).

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Wood whose telephone number is (571) 270-7318. The examiner can normally be reached on Monday to Friday 8:00 AM to 4:00 PM.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Seema Rao, can be reached at the following telephone number: (571)272-3174.

The fax phone number for the organization where this application or proceeding is assigned is 571-274-7318. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/S.W./
May 26, 2009
Steven A. Wood
Examiner

Art Unit 2416

/Kevin C. Harper/
Primary Examiner, Art Unit 2416